

Atty Dkt. No.: 10010466-3
USSN: 10/810,396

REMARKS

Formal Matters

Claims 1-11 and 13-20 are pending. Claims 3, 10, 11, 14, 16, 18 and 20 are withdrawn by the Examiner. Claims 1, 2, 4-9, 13, 15, 17 and 19 were examined and rejected.

Applicants respectfully request consideration of the pending claims in view of the remarks made below.

Rejection of claims under 35 U.S.C. § 112-first paragraph

Claims 1, 2, 4-9, 13, 15, 17 and 19 were rejected as failing to meet the enablement requirement of 35 U.S.C. § 112, first paragraph. Specifically, the Office Action asserts that the claims are *single means* claims, and not a combination of elements. The Applicants respectfully disagree with the Office's position.

With respect to single means claims, the MPEP at § 2164.08(a) states the following "A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph."

As set forth in MPEP § 2181, "means" limitations solely recite a property that does not impart any structural feature on the claimed subject matter. Means limitations usually recite the word "means".

The Applicants respectfully submit that claims 1, 2, 4-9, 13, 15, 17 and 19 recite a structural feature: an ionization chamber. None of the claims recite the word "means". As such, these claims are not single means claims.

In more detail, all of the rejected claims have a structural element provided by the phrase "ionization chamber", which is a well known term in the art that is explicitly defined in the specification to mean "a solid structure that substantially encloses a volume in which the sample, typically a gas, is ionized. The solid structure may also constitute part of a mass analyzer; for example, an ion trap wherein electron impact or chemical ionization occurs inside the trap." Further, the rejected claims recite a "super alloy", adding a further structural feature to the rejected claims.

In view of the foregoing discussion, the Applicants respectfully submit that the rejected claims recite a structural limitation: an ionization chamber. Accordingly, these claims cannot be "single means" claims.

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Furthermore, the Office Action indicates that a combination of elements is required to satisfy the enablement requirement of 35 U.S.C. § 112, first paragraph. The Applicants note that that, according to the MPEP (as cited above), a combination of elements is required to satisfy the enablement requirement of 35 U.S.C. § 112, first paragraph, *only if a means limitation is present in the claim*. The Applicants have reviewed the MPEP and have found no requirement that a combination of elements is statutorily required to satisfy the enablement requirement of 35 U.S.C. § 112. According to the law, therefore, a single element, as long as it is not a "means" limitation, is sufficient.

As such, the Applicants respectfully submit that there is no requirement under 35 U.S.C. § 112 for a combination of elements in a claim, unless the claim solely consists of a "means" limitation. Since the rejected claims do not recite any means limitations, there is no requirement for a combination and this rejection may be withdrawn.

In view of the foregoing discussion, the Applicants respectfully request withdrawal of this rejection.

Rejection of claims under 35 U.S.C. § 103

Claims 1, 2, 4-9, 13, 15, 17 and 19 are rejected under 35 U.S.C. § 103 as being unpatentable over Mankowski (5,075,966). Specifically, the Office asserts that Mankowski discloses a rocket engine containing a component that can be made of a super alloy that renders the rejected claims obvious. The Applicants respectfully disagree with the Office's position.

According to MPEP § 2131.01(a), a reference used in a rejection under 35 U.S.C. § 103 must be analogous prior art. Quoting from the MPEP, "the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." In other words, if a reference is not reasonably pertinent to the applicant's field of endeavor, it cannot be used in a rejection of claims under 35 U.S.C. § 103.

The Applicants respectfully submit that rocket engines are not reasonably pertinent to the Applicants' own field of endeavor, i.e., ionization chambers for mass spectrometers. The Office argues that the combustion chamber of the cited rocket engine contains ions and accordingly can be thought of as a type of ionization chamber. However, the Applicants respectfully submit that rocket engines are so far removed from the Applicants' own field of endeavor, i.e., ionization chambers for mass spectrometry, they cannot represent analogous art.

For example, rocket engines and mass spectrometer ionization chambers are employed in

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completely different machines (i.e., rockets versus mass spectrometers), are used for vastly different purposes (i.e., propulsion versus sample ionization) and are exposed to different very different materials (e.g., rocket fuel versus a biological sample contain analytes). These facts support the statement that the rocket engine arts are not related to the mass spectrometer ionization chamber arts, and, as such, these arts should be treated as non-analogous by the Office. In other words, one of skill in the mass spectrometer arts would not logically look to the rocket engine arts to solve a problem with an ionization chamber.

The Applicants respectfully submit that this argument, alone, is sufficient to merit the withdrawal of this rejection, which action is respectfully requested.

If the foregoing discussion fails to remove this rejection, the Applicants further submit that the Office has failed to establish a *prima facie* case of obviousness because the cited art fails to teach all of the claimed elements and fails to suggest the claimed invention.

The Applicants note that all of the rejected claims recite "a ionization chamber for a mass spectrometer".

The Applicants respectfully submit that this element is not disclosed, taught, or fairly suggested by Mantkowski or otherwise provided in the reasoning set forth in the Office Action.

As such, the Applicants respectfully submit that the Office has failed to establish a *prima facie* case of obviousness since Mantkowski fails to provide any of the above elements.

As such, even if the Examiner could argue that Mantkowski is analogous art, this rejection should still be withdrawn because the rejection fails to teach all of the elements of the claimed invention.

Finally, even if the Office could set forth a rejection in which all of the elements of the rejected claims were provided, the Office has still not established a *prima facie* case of obviousness because the Office Action has failed to provide any suggestion to use a super alloy in a mass spectrometer ionization chamber.

Mantkowski provides no suggestion to use a super alloy in an ionization chamber of a mass spectrometer. In fact, Mantkowski fails to provide any indication of the advantages of super alloy for reactive analytes, and fails to teach that super alloys are inert to reactive samples. Mantkowski merely acknowledges, in column 5, lines 15-16, that super alloys are heat resistant, not reactive sample resistant.

In other words, in addition to failing to suggest the use of super alloys in ionization

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chambers, Mantkowski fails to recognize a property of super alloys that makes them suitable for the subject invention: inertness to reactive analytes. As such, in view of Mantkowski's disclosure, a skilled researcher would find no motivation to combine Mantkowski's super alloys into an ionization chamber for a mass spectrometer.

Accordingly, even if the Office could reason that Mantkowski is analogous art and all the elements of the claims were provided in this rejection, the Office has still not established a *prima facie* case of rejection because it has failed to set forth any motivation to combine Mantkowski's super alloy into an ionization chamber, as claimed.

In view of the foregoing discussion, the Applicants respectfully request that the Examiner withdraw this rejection and allow all the claims.

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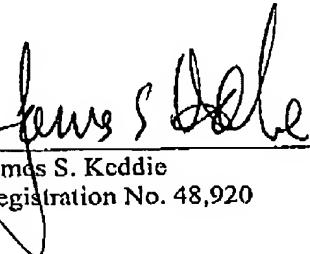
CONCLUSION

The Applicants respectfully submit that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone Timothy Joyce at 650 485 4310.

The Commissioner is hereby authorized to charge any fees under 37 C.F.R. §§ 1.16 and 1.17 which may be required by this paper, or to credit any overpayment, to Deposit Account No. 50-1078.

Respectfully submitted,

Date: 3/9/05

By: 

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